

BRISTOL WWTF

The Town of Bristol first built a community wastewater treatment facility in 1935, making it one of Rhode Island's first communities to do so. In 1989, the town constructed a state-of-the-art facility that uses "Rotating Biological Contactors," or "RBC's" as they are commonly known. Unlike conventional activated sludge plants, RBC's use thousands of large-surface-area plates that are rotated within the wastewater stream; they provide a home for pollution-reducing bacteria. Recent upgrades include the addition of a dechlorination system (to minimize the toxic effects of chlorine, which is used to disinfect the treated water before it is discharged). Improved odor control, new headworks and new primary clarifiers are also more recent upgrades. Located off Wood Street, Bristol's facility discharges into Bristol Harbor.



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Overall Treatment: Good

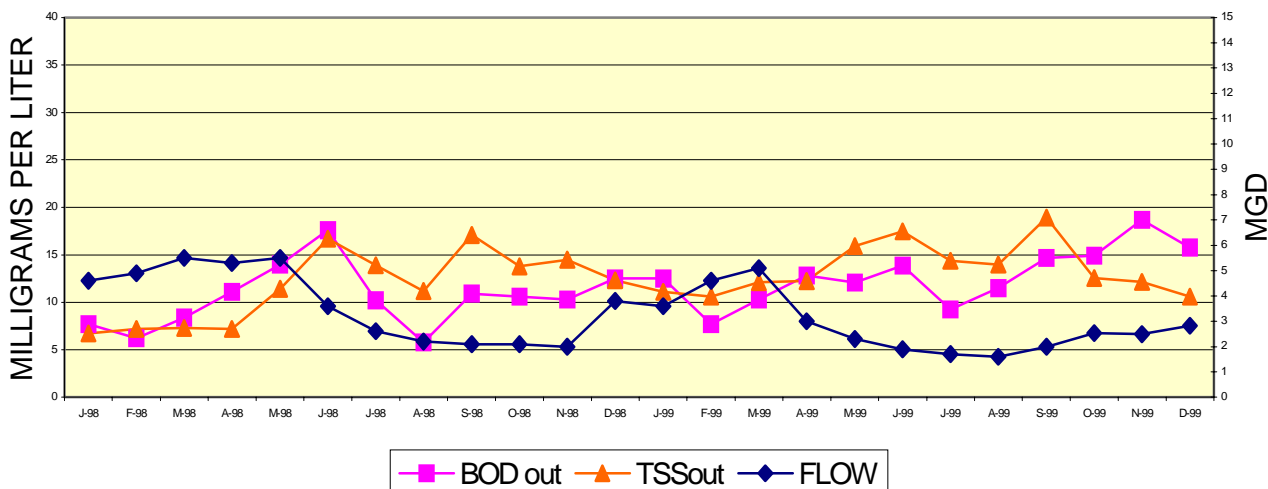
Having 6 monthly violations for flow in 1998 (January through June) and two in 1999 (February and March), the facility had no other monthly violations for flow, BOD, TSS or fecal coliform. This resulted in rating of Good.



CURRENT AND FUTURE CONCERNS

Bristol reissued discharge permit became effective September 1, 1999. The new permit contains limits similar to the previous permit for total residual chlorine, copper and cyanide, and the facility is able to comply with all water quality based limits. As the new permit was being developed, RIDEM noted that the facility was approaching its design flow of 3.79 MGD. The town and RIDEM found that there were areas with excessive Inflow and Infiltration. So subsequent to the issuance of the permit, Bristol entered into a Consent Agreement with the RIDEM that establishes a schedule to evaluate and reduce the flow of ground water and rain water into the sewers.

BRISTOL EFFLUENT DATA 1998/1999



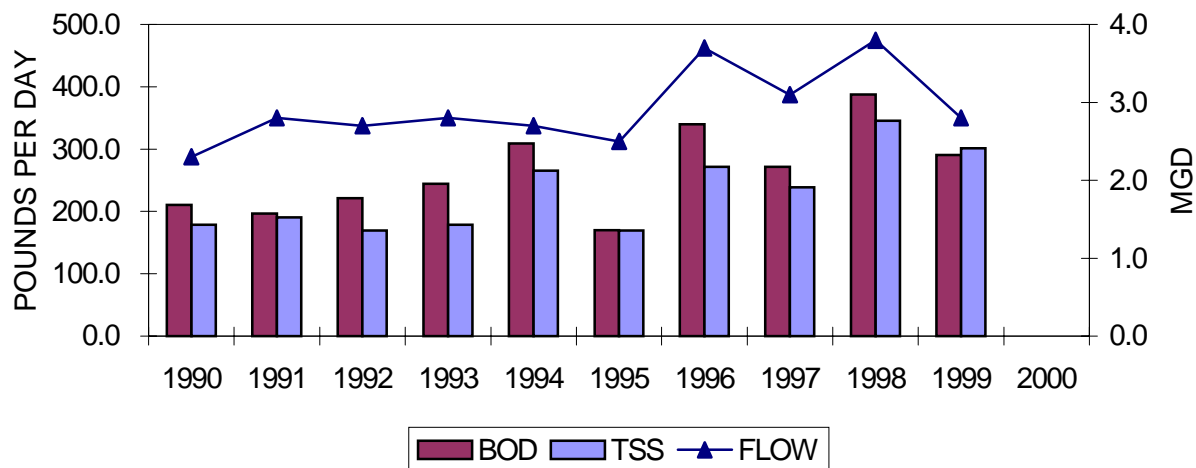
BEGAN OPERATION 1935

ANNUAL SURVEY

PARAMETER	1996	1997	1998	1999	PERMIT LIMIT	VIOLATIONS 1998/1999
FLOW (MGD)	3.7	3.1	3.8	2.8	3.79	6/2
BOD INFLUENT (MG/L)	166.1	207.3	230.3	244.8		
BOD EFFLUENT (MG/L)	11.2	11.2	10.4	12.8	30	0/0
BOD INFLUENT (LBS./DAY)	4923.5	4676.3	6030.0	5215.0		
BOD EFFLUENT (LBS./DAY)	339.65	271.9	338.0	290.5		
BOD % REMOVAL	93.0	94.3	94.4	94.4		
TSS INFLUENT (MG/L)	126.5	153.5	240.5	195.4		
TSS EFFLUENT (MG/L)	9.1	9.7	11.6	13.5	30	0/0
TSS INFLUENT (LBS./DAY)	3779.0	3503.5	6491.8	4130.5		
TSS EFFLUENT (LBS./DAY)	271.6	238.6	345.7	301.0		
TSS % REMOVAL	92.4	93.2	94.7	92.7		
FECAL COLIFORM (MPN/100ML)	29.7	27.2	15.0	5.3	200.0	0/0
CHLORINE RESIDUAL (MG/L)			0.14	0.1	0.36*	8/1

*Daily Maximum Limit

BRISTOL 1990 -1999 DATA



Operations & Maintenance

History of bypass problems with Mt. Hope pump station has resulted in plans to reroute the sewer system to alleviate excessive flow to that pump station. There were three facility/pump station bypasses in 1999. No major improvements were made in 1999.

1998 O&M Rating: 9 out of 10

1999 O&M Rating: 9 out of 10

1998 Laboratory Rating: 5 out of 5

1999 Laboratory Rating: 5 out of 5

Overall O&M Rating: Good

1998 SLUDGE DISPOSAL METHOD

Composting/Landfill Cover

SLUDGE PRODUCED

537 DRY TONS

1999 SLUDGE DISPOSAL METHOD

Composting/Beneficial Use

SLUDGE PRODUCED

550 DRY TONS

Bristol operates a sludge compost facility. Sludge generated at the wastewater facility is dewatered and transported to the compost facility which is located at the Bristol Town landfill. In 1999, DEM granted approval to Bristol to distribute the sludge compost to the public as fertilizer. Bristol is the first facility in the state to receive such an approval.